THE

BOSTON MEDICAL AND SURGICAL JOURNAL.

VOL. XXIX. WEDNESDAY, JANUARY 3, 1844. NO. 22.

RHEUMATIC INFLAMMATION OF THE EYE.

A Clinical Lecture by Mr. Guthrie, at the Royal Westminster Ophthalmic Hospital, November, 1843.

You have seen, gentlemen, the termination of the prevalence of rheumatic inflammation of the eye; it has passed away, except as a disease of casual occurrence, and as your attention is no longer especially attracted to it, we may with great propriety sum up our observations on the subject, after the careful examination we have just made of many of the cases. There have been five persons treated in the Hospital, four cases have occurred to me in private life, and twenty-seven have presented themselves as out-patients. Three of the four cases in private life have not had a relapse; most of the others have suffered more or less from its occurrence, and where the patients have been much exposed, it has occurred two, three or more times, even afterthe eye was apparently well. All the cases have terminated, or are terminating, favorably, but not all without some defect, the patients complaining of a slight deterioration of sight, which in most instances has passed away. On examining the eye with the small telescope, you perceive it is the iris which has suffered, the pupillary edge becoming adherent by points or processes to the capsule of the lens behind, whilst the fibres of the iris also adhere to each other, so that although little defect may be apparent to the naked eye, the irregularity of the edge of the pupil is well marked under the glass; and the portions of pigment which have been detached from the cornea, may be distinctly observed when the pupil has been dilated by belladonna. The defect of sight depends almost always on the number, extent and situation of these portions, with respect to the centre of the pupil; and a part, if not the whole, of these spots, appear in many cases to be thinned or absorbed, and sometimes removed with time, so as not to impede the sight, and the patient gradually recovers his former power of vision. We have had no case in which both eyes have been affected at the same time, although the second, or other eye, had suffered from the same complaint at a former period, showing the prevalence of a rheumatic diathesis in several of these persons, although certainly not in all, but which is more marked in others by the occurrence of rheumatism in the joints. I am not aware, however, of anything like true metastasis from any one part to the eye, nor has any

distinct alternation of disease taken place from the eye to any other part; nor have I remarked this as an ordinary occurrence at other times, although rheumatic disease often exists in the eye and in other parts at the same time, and with a greater or less degree of severity. I have seen this most frequently in that complaint which is denominated gonorrhœal rheumatism, but then the affection of the eye is not purely a rheumatic sclerotitis, or iritis, and is often attended by sub-conjunctival cellular inflammation, causing chemosis, and may also affect the conjunctiva, and be attended by a muco-purulent discharge. In one case of catarrho-rheumatic inflammation, both eyes were affected, and there is a peculiar case now in the Hospital deserving your best attention:—

Robert Windover, aged 49, of 10 Church street, has had weak eyes for some time, and attended at the beginning of this month (Nov.), for them, but staid away in consequence of rheumatism, until the 22d, when he again presented himself with purulent inflammation in both eyes, the right being the worse. The complaint began the day before, by an itching of the lids, and a flow of hot tears, accompanied by a yellowish discharge, which glued the lids together during the night, the itchiness gradually increasing to violent pain, which prevented sleep, and caused the upper lid to swell. The next day (Thursday) the discharge was great and puriform, the eyelid much swollen, and he complained of great pain. The chemosis was considerable, although it did not encroach on the cornea, the surface of which appeared to be slightly abraded. Countenance pale, pulse feeble; is accompanied by his wife, a healthy-looking woman, who says he has lived badly of late, and has a slight discharge from the urethra, which he cannot account for, but which he has often had before. Has suffered from several attacks of rheumatism, two of which confined him to bed, and has noticed that whenever these rheumatic pains came on, they were soon followed, with one exception, by a urethral discharge. Can remember having had seven rheumatic attacks, six times followed by urethral discharges. Had a similar attack, he thinks, to the present, when at Chatham, and has had weak eyes ever since, but had not at that time any urethral discharge; has taken colchicum and turpentine in large doses for the cure of his rheumatism, and has been once salivated.

I ordered this man to be immediately admitted, because I was satisfied he would lose his eye if he remained an out-patient. I did not bleed him, because he appeared to be deficient in power, and that I thought the great local mischief might be arrested by local means. I therefore directed several drops of a solution of sixty grains of the argentum nitratum, lately dissolved in one ounce of distilled water, to be poured into the right or worse eye at 2 o'clock, and to be repeated at night, and of thirty grains to the ounce into the left eye; four grains of calomel, and six grains of colocynth, to be given immediately, followed by a black dose in the morning. To be put to bed, and the eyelids cleansed every hour with a solution of alum, one drachm to the pint of water, when awake.

Nov. 23.—Says he is much better this morning, and slept tolerably well; that the application of the solution gave him great pain, which

subsided in about an hour, leaving him much easier: that the application in the evening had the same effect; that he is now free from pain, and the eyes less gritty; the swelling of the lid has diminished, and the chemosis has nearly disappeared, the discharge less: the amendment on the whole considerable. The purgative medicine has operated well. Full diet, and half a pint of porter. The solution, &c., to be continued, and fifteen grains of pulv. cinchonæ with six grains of sesquicarb. of soda three times a day.

Nov. 24.—Gradually improving. Diet and remedies as before, with calomel and colocynth at night, and an aperient draught in the morning.

Nov. 25.—Improving. The solution to be applied only once, and in the morning, and the alum lotion, to be used with a syringe; the edges of the lids to be kept greased with ung. cetacei; slept well.

Nov. 26.—The strength of the solution to be diminished to ten grains to the ounce to both eyes. The discharge from the left eye has nearly ceased, that from the right is much less; the chemosis has entirely gone, and the conjunctiva of the ball much whiter; cornea clear, iris natural, the conjunctiva of the lids is thickened from old disease, and is very red, and from this part the discharge proceeds.

Nov. 27.—This man is cured of the severe attack, which would have cost him under any other mode of treatment one eye, in all probability, and perhaps both.

You may call this, gentlemen, a case of rheumatic inflammation, of gonorrheal inflammation, or of gonorrheal rheumatism, or any thing else you please; only, gentlemen, do me the favor to remember that I teach you what is of more consequence, viz., how to cure it, and you could not have a more instructive case for observation, in a debilitated habit.

Of the 36 cases, 21 were in males, 15 in females. There were none below 20 years of age, and 2 only above 50; and of various trades and occupations, the tailors preponderating. Eighteen of the 36 were recent attacks, and 18 were cases of several days' duration, or in which relapses had taken place, before they applied here for advice. In 1 case the paroxysms of pain came on in the morning, and not at night. In 2 cases the vessels of the sclerotica, which penetrate to the choroid coat, remain enlarged, ready for evil on the application of any exciting cause. In Mrs. Bridges, who is in the Hospital, this is well seen, and if the case is neglected, it will end first in a change in the form of the eye, by which it will become more conical, and ultimately terminate in a varicose state of the vessels, and glaucoma. This will be prevented by great personal care to avoid exposure, and the improvement of the general health by tonics, counter-irritation, slight local depletion when necessary, and the occasional use of colchicum, aconite and opium.

In some of the recent cases the cure has been accomplished in from three to five days, by means of cupping, by a dose of calomel and colocynth, and an infusion of senna and salts, colchicum and aconite, combined with opium when they began to act too sharply on the bowels. In the cases of longer duration, bark and soda have been added with advantage, after the other remedies had diminished the powers of the individual, al-

though their effects required to be continued for some days in a more moderate dose. In five old cases calomel and opium were added to the colchicum and aconite, until they affected the gums, before the desired relief was obtained.

I have punctured the cornea in five cases. In the first case, of P. Dudy, to which I alluded in my last lecture, and whose case is complicated with cataract, it gave relief, and has been repeated with advantage. In two other cases of medium standing it rendered no service, whilst in two others of commencing relapse, it was of use, and will always, I believe, be found of use in all affections of the vessels of the sclerotica, in which slight inflammatory attacks recur on any moderate exposure to cold and moisture, or indeed, apparently without it. It acts, I presume, by relieving the vessels which secrete the aqueous humor; it is an operation, however, which alarms people, and they do not readily submit to it in private life, and, as an accident may happen to the capsule of the lens if the pointed instrument is kept in the anterior chamber until all the fluid is evacuated, I introduce a small blunt probe until it has all escaped, for if a part only is let out, very little good follows the operation; it may even do harm, from the irritation excited in fixing the eye.

I have only casually mentioned the use of the belladonna, as I wished to reserve the observations I had to make upon it until the nature of the disease was more completely developed. You have seen, and may see in several cases, that although all other traces of disease have been removed, some defect remains in the appearance of the pupillary edge of the iris, in the motion of this part, and on the surface of the capsule of the lens. It brings home to you, then, with irresistible force, the fact that this complaint is not alone a rheumatic inflammation of the sclerotica, but also of the iris. It is not the formidable disease so graphically depicted in books as rheumatic iritis, which you will very rarely see, but it is the disease you will often see, and the more important points of which you ought to be acquainted with; and the most important of all is the peculiar kind of inflammation of the iris, which, although little noticed by a careless or casual observer, is not the less dangerous, as tending always to impair, if not eventually to destroy, the sight.

Belladonna, from the power it exerts, when applied externally, of dilating the pupil, is an important remedy, and if it could be applied in time, would generally so far dilate the pupil as to cause it to remain in its ordinary state of dilation, when not under the influence of a strong light. It should, therefore, be applied to the forehead and brow morning and evening, on the first appearance of this complaint, and when this is subdued by the vigorous measures recommended, and the use of the belladonna is omitted, the pupil which nevertheless has formed some adhesions whilst in its temporary and partly-dilated state, will return to its usual and ordinary size, and vision will not be impaired. When, however, the inflammation runs high, and has been fairly established, the belladonna is not capable of exerting a dilating influence upon the iris, not even for several days, and I have often thought it has augmented the disease, by dragging on the inflamed part, the patient complaining so much

of an increase of pain after each application as to object to its continuance. It should, therefore, be applied shortly after the commencement of the attack, or only after the intensity of the inflammation has been subdued by vigorous treatment. It may be dissolved in tincture of opium, or applied with powdered opium and mercurial ointment.

The relapses are the most inconvenient to the patient, and are often difficult to treat. On the first occurrence of the disease the sufferer is usually in tolerable health, and possesses considerable power, so that he will bear moderate general or local bleeding well, and is for the most part greatly relieved by a suitable abstraction of blood, accompanied by a brisk mercurial aperient, followed by a draught of senna, manna and salts. In the first attack I usually give the colchicum and aconite in water, or in a saline draught, and a dose of opium, morphia, or the pulv. ipecac. comp. at night, attending carefully to the state of the skin, and to the secretions generally. The patient should be kept in an equable temperature, and the diet should be as mild and as simple as possible, without meat, or anything stimulating. After a relapse, when the powers of the individual are diminished, I add bark or quinine and soda, to the treatment, and sometimes rhubarb, if the bowels are confined; and if colchicum and aconite should still be necessary, they are then to be given with opium, to prevent their acting on the bowels. In a first attack there is often a good deal of fever and constitutional derangement; after a relapse or two, the constitution is often but little implicated, and the complaint would seem to be comparatively local, when a reasonably generous diet will often expedite the cure, whilst it appears also to be useful in preventing a return of the complaint, in which it will be assisted by sarsaparilla, with the iodide of potass., and the various preparations of iron. The bad effects of the disease on the iris are not so rapidly induced in a relapse, although the external appearance of redness may be as great as in a first attack of the complaint. Two days ago, Mr. Boyd, who is in the Hospital, was well. Yesterday he suffered a relapse, and the eye had a more dusky-red appearance than ever; pulse 76, not strong; he has the pupil sufficiently dilated by the belladonna; and has taken colchicum and aconite three times a day. I have ordered him bark to-day, and he is better.

One case only of abscess of the cornea with onyx has presented itself since I gave the lecture on that subject I desired the man to be admitted immediately, viz., on the 20th, and divided the cornea by a perpendicular incision, in the manner I have directed, and which entirely removed the pain; he took calomel and colocynth at night; salts in the morning.—21. Free from pain, although has some feeling of sand in the eye; anterior chamber empty; wound gapes a little, and the matter adheres to the edges. The eyes to be bathed with warm water occasionally, and the pad to be continued; upon middle diet.—Nov. 24. Anterior chamber filling, ulceration of the surface diminishing, conjunctiva still red; two grains of calomel and two of quinine every six hours.—27. Calomel to be omitted; anterior chamber full, and is well, as regards the abscess and the onyx.—*London Medical Times.*

WHITE SULPHUR SPRINGS.—NO I.

[Communicated for the Boston Medical and Surgical Journal.]

[JOHN J. MOORMAN, M.D., the well-known resident physician at the White Sulphur Springs, is the author of the following interesting paper, which will be followed by others, from time to time, from the same intelligent source.—ED.]

The *White Sulphur Springs* are located in the county of Greenbrier, Virginia, on Howard's Creek, and on the immediate confines of the "Great Western Valley," being but six miles west of the Allegany chain of mountains which separates the waters which flow into the Chesapeak Bay, from those which run into the Gulph of Mexico.

The waters of the Spring find their way into Howard's Creek, two hundred yards from their source, which after flowing five miles, empties them into Greenbrier River. The Spring is situated in an elevated and beautifully picturesque valley, hemmed in by mountains on every side. *Kates Mountain*, celebrated as the theatre of the exploits of a chivalrous heroine in the days of Indian troubles, is in full view, and about two miles to the south:—to the west, and distant from one to two miles, are the *Greenbrier Mountains*; while the towering *Allegany*, in all its grandeur of length and height, is found six miles to the north and east.

This Spring is in the midst of the celebrated "spring region;" having the "*Hot Spring*" thirty-five miles to the north—the "*Sweet*," seventeen miles to the east—the "*Salt*" and "*Red*," the one twenty-four and the other forty-one miles to the south—and the "*Blue*," twenty-two miles to the west. Its latitude is about 37½ degrees north, and 3½ west longitude from Washington. Its elevation above tide water is two thousand feet. It bursts with unusual boldness from rock-lined apertures, and is enclosed by marble casements five feet square and three and a half feet deep. Its *temperature* is 62 deg. of Fahrenheit, and remains uniformly the same during the winter's blast and the summer's heat; any apparent variation from this temperature will be found, I think, to have been occasioned by the difference in thermometers, as repeated trials with the same instrument prove the temperature to be uniform.

The principal spring yields about eighteen gallons per minute; and it is a remarkable fact that this quantity is not perceptibly increased or diminished during the longest spells of wet or dry weather; while other bold springs of the country have failed during the long droughts of summer, this has invariably observed the "even tenor of its ways." There is no discoloration of the water during long wet spells, or other evidences that it becomes blended with the common water perculating through the earth. The quantity and temperature of the water of this Spring being uniform under all circumstances, gives a confidence, which experience in its use has verified, of its uniform strength and efficiency. The water is most clear and transparent, and deposits copiously, as it flows over a rough and uneven surface, a *white*, and sometimes, under peculiar circumstances, a *red* and *black* precipitate, composed in part of its saline ingredients. Its *taste* and *smell*, fresh at the Spring, are that of all waters

strongly impregnated with sulphuretted hydrogen gas. When removed from the Spring and kept in an open vessel for a sufficient length of time for this gas to escape, or, when it has been *heated* or *frozen* for this purpose, it becomes essentially *tasteless*, and *inodorous*, and could scarcely be distinguished, either by smell or taste, from common lime-stone water. Its cathartic activity, however, is rather increased than diminished when thus insipid and inodorous. It does not lose its transparency by parting with its gas, as many other waters do; nor does it deposit its salts in the slightest degree when quiescent—not even sufficient to stain a glass vessel in which it may be kept.

The gas of this Spring is speedily fatal to all animals when immersed, even for a very short time, in its waters. Frogs, thus circumstanced, survive but a few moments; fish, in two minutes after their immersion in the water, manifest entire derangement, with the greatest distress, and uniformly die in less than three minutes.

There is but little in the early history of this celebrated watering place, especially worthy of preservation. Tradition says that the charming valley in which it is situated, was once a favorite "hunting ground" of the proud *Shawanees*, who then owned and occupied this fair region, and the numerous ancient graves and rude implements of the chase, that are found in various parts of the valley, sufficiently attest the truth of this legend. That a small marsh, originally contiguous to the Spring, was once a favorite deer and buffalo "lick," is well known to the oldest white settlers of the country; and it is confidently asserted by some of that venerable class that the Spring was known to the Indians as a "*medicine water*," and that since their migration across the Ohio, they have occasionally been known to visit it for the relief of rheumatic affections. Whether this legend be truth or fiction, we cannot avouch; authentic history, however, abundantly testifies to the reluctance with which its ancient owners abandoned this lovely valley to the rapacious avarice of the invading white man.

During the year 1774, the proud, but untutored and ill-fated Shawanees being overpowered by the encroaching colonists from Eastern Virginia, and having sustained, in October of that year, a signal defeat by the Colonial troops, at Point Pleasant, were forced finally to abandon their country, and seek shelter and protection with the main body of their tribe then living on the waters of the great Scioto; not, however, until by frequent battles and midnight murders, they had testified their attachment to their ancient hunting grounds and the graves of their fathers.

The property on which this Spring is situated, was originally patented for ——— Carpenter, one of the earliest pioneers of this country, and who was subsequently killed by a band of marauding Indians at the fort at the mouth of Dunlap's Creek, near where the town of Covington now stands. It is rather a remarkable fact, in a country like this, in which land is so prone to change owners, that this, as a whole, has never been bought or sold, the present proprietor owning it by right of descent from the original patentee.

The precise time at which this Spring, now so celebrated among mine-

ral waters, was first used for the cure of disease, cannot now be ascertained with absolute certainty. It is believed, however, that a Mrs. Anderson, the wife of one of the earliest settlers, was the first white person who tested its virtues as a medicine. In 1778, this lady being grievously afflicted with rheumatism, was borne on a litter, from her residence, ten or fifteen miles, to the Spring, where a tent was spread for her protection from the weather; and a "*bathing tub*" provided by felling and excavating a huge tree that grew hard by. Here she remained until she had entirely recovered, drinking the water from the fountain, and bathing in the sulphur water previously heated in the trough by "hot rocks." It is reasonable to suppose that the fame of this cure spread abroad among the "settlers," and from them into Eastern Virginia, and among the few "spring going folk" who then annually visited the Sweet Spring, not many miles distant. Accordingly, in 1779, and from that to 1783, there were annually a few visiters here, who spread their tents near the Spring, no house having then been erected, and with the rude "trough" for a bathing tub, and this protection from the weather, are reported to have spent their time most agreeably and profitably. Some of these primitive visiters "who dwelt in tents," have visited the Springs of late years, and with pleasurable emotions marked out the spot where their tents stood some sixty years ago, while they recounted with delight the amusements and pleasures they then enjoyed.

In 1784–5 and 6, numerous "log cabins" were erected, not where any of the present buildings stand, but immediately around the Spring, not one of which, or the materials which composed them, is now remaining.

The present proprietor of this property came into possession of it in the year 1808, but did not personally undertake its improvement until the summer of 1818. Before this period, the buildings for the accommodation of visiters, although sufficient for the number that then resorted to the place, were exceedingly rude, being altogether small wooden huts. The interest and enterprise of the proprietor soon led him into a different and more appropriate system of improvement, and from small beginnings, he has gone on, progressing in the rapid ratio of demand, until from the "tent" accommodations in 1779, and the "log cabins" in 1784, the place, now both in elegance and extent, exhibits the appearance of a neat and flourishing village, affording comfortable and convenient accommodation (including the surrounding hotels) for from twelve to fifteen hundred persons.

Analysis.—The solid matter procured by evaporation from 100 cubic inches of the White Sulphur Water, when dried at 212 deg., weighs 65.54 grains. This consists of:—

Sulphate of lime	Chloride of calcium
" of magnesia	" of magnesium
" of soda	" of sodium
Carbonate of lime	Proto-sulphate of iron
" of magnesia	Sulphate of alumina

Earthy phosphates—*a trace*	Precipitated sulphur
Azotized organic matter	Iodine

The gaseous matter consists of:—

Sulphuretted hydrogen	Nitrogen
Carbonic acid	Oxygen

In subsequent numbers I design to give some account of the medical nature and applicability of this water to particular diseases, with some general directions and precautions in its use, under particular circumstances.

December, 1843.

PHRENO-MAGNETISM.—NO. III.

[Communicated for the Boston Medical and Surgical Journal.]

An important circumstance in the Mesmeric sleep, is, that all the material conditions, by which sensation is ordinarily attended, are suspended. It is not the bodily sensibility merely that is destroyed, but the external mechanical laws, which act on it, are inoperative. Not only the eye is blind, but the person sees where the straight lines of light do not act. Not only is the ear deaf, but there are no vibrations of air to impart vibratory impulses to it, when a question addressed mentally to the patient is answered by him. Had either one of the mechanical conditions of sensation, or rather perception, remained, there might be a shadow of reason for modifying the other and extending it over the new sphere of the mind's action. But when we find all the mechanical laws suspended, viz., the external impulses and the internal adaptations to receive them, most surely the natural inference is, that the mind perceives by a new mode, so far as they are concerned. And as we find no reason to infer a change in those operations of the mind which are revealed to us by consciousness, it is here we are bound to look for the universal and necessary fact on which perception depends. The physical laws are, we should also infer, arbitrary and contingent; associated, indeed, with perception, while the mind maintains its usual relations to the external world, but having no essential connection with it.

But it may be inquired, if that energizing of the agent, which when directed to its intellectual operations, is called attention, is the only act which precedes perception, how happens it that we are not conscious of it in sensation as in our other modes of knowledge? The answer to this is obvious:—In perception, as contra-distinguished from sensation, the mind by habit executes several processes with such rapidity as to escape its notice. Hence, until the time of Bishop Berkeley, it was the prevailing opinion that the eye judged intuitively of the distance and magnitude of objects; a knowledge which he proved must have been the result of experience. Now as sensation precedes perception, the mind in like manner must have lost, according to the law of habit, the power of observing its acts; and would not be sensible of it, were it a fact that it always attends to the object before it perceives.

Nor is it by any means inconceivable that this power of varying and fixing its attention is the only circumstance that separates the individual agent from the action of the laws of nature. All the ideas with which the mind is affected may be the result of this spontaneous activity, in connection with an Universal Intelligence, at once the cause of the physical laws without and the substance of mind within, sustaining the one and containing the other; through which the law of association acts, transcending the sphere of individual consciousness. However this may be, it is not my purpose at present to try to explain it. The fact that the operations purely mental depend on attention would seem to be established, as much as any fact in mental science, if it be admitted that consciousness is in accordance with it as far as it extends. For it must be acknowledged that we sense a thing in proportion to the *degree* of attention we afford to it; that we remember, compare, and judge well, in proportion to the concentration of attention on the objects of our thoughts; that the difference between the intellectual characters of different men, depends on the relative powers of attention; that when one sense is lost (the sight, for instance), by attending to impressions made on another, the mind can almost recover its loss; that in the vast majority of cases of insanity, want of control, another name for varying attention, is so obviously the leading symptom as to form the foundation of what is called the moral treatment. And if we add to these considerations the fact that in natural somnambulism the patient perceives those things only to which the attention is directed by the current of his thoughts, as well as the very striking fact that in artificial somnambulism, or Mesmerism, he is obliged to make an effort to fix his attention in order to know what is required of him, all the proof the subject is susceptible of is afforded.

The view above given not only takes away all miraculous appearance from the phenomena of magnetism, but brings them within the bounds of probability. If it be admitted that the individual agent be bound, by the conditions of its ordinary existence, to associate its perceptions with impulses from without, along the course of the nerves (impulses made in accordance with material laws), those perceptions would necessarily be limited within the sphere of their propagation. Hence we could only perceive those objects of sight, which are within the range of impulses of light propagated in straight lines; we could only perceive those objects of hearing which are within the range of sonorous vibrations of the air; and so with the other senses. But if, again, the ordinary conditions of its action could by any means be suspended, these limitations, we should naturally infer, would be suspended with them, for they are dependent on the same material laws, as the first conditions. The mind, or rather the agent, would therefore have no bounds set to its powers of perception, and would be as likely to know what was said or done, or what exists, in one place, as in another, provided its attention could be conducted along some other train of association to the fact required.

The student of physiology who derives his ideas on the subject from the works which have been most popular with the profession for the last fifty years, would find it difficult to believe that the nervous system of

man and animals is not the seat of something less than an infinite number of specific properties, and that the great object of his favorite science is to investigate them. But if he would divest himself of the prejudices that must fill his mind from the study of the different experimenters, from Magendie to Marshall Hall, to say nothing of the whole class of phrenologists, neurologists, &c., and examine the structure and functions of the nervous system by the light of anatomy and mental philosophy, he would find no reason to infer that that analogy of nature which refers to one kind of structure, but one specific property, is to be violated in the case of the nervous, any more than in that of the muscular or arterial system. He would recognize in the white nervous structure but one property; that of an adaptation to the reception and propagation of fine material impulses: and in the ganglionic or gray matter, whether arranged over the surface of the brain, through the centre of the spinal marrow, or disposed in the form of knots along the course of the nerves, he would perceive nothing but the intermixture of arterial blood with the fibres proper, and would recognize in them nothing but an adaptation to stop or renew, by counter-impulses, those propagated along the nerve. Such counter-impulses he would also have reason to infer must be the result of the passage of the particles of carbon and oxygen of the arterial, into the carbonic acid of the venous blood. And when physiology discloses the fact that pressure on a nerve, or concussion, so well calculated to disturb the propagation of material impulses, destroys its function while it lasts; and pathology shows that important disease of the brain may exist unattended by pressure without manifestly impairing the faculties, he must be slow to believe that any other property, in reality, belongs to it. Ten to one he would regard the mind itself as the source of these specific properties; and the physiologist who employed himself in hunting over the cortical substance of the brain for the seat of Hope, Benevolence, Comparison, &c., would in his view be worse set to work than he who should search in the cortical substance of the kidney for organs to secrete the various constituents of the urine, or the different kinds of calculi. Nor is the occupation of those more elevated, who seek, by slicing the cerebellum, to find the seat of muscular motion or the sexual appetite; or who think, by taking away the ganglia of the special senses, they remove the fountain head of instinct or emotion.

These remarks are not intended to ridicule or to undervalue experimental physiology or its cultivators. Their labors will no doubt serve to promote the advancement of knowledge, when duly estimated; when, for instance, they endeavor to investigate what offices, the performance of which the mind *associates* with the action of individual nerves, instead of attributing those offices to some occult, yet specific endowments of the nerves themselves. The air of self-complacency with which they assume to themselves the title of reasoners from facts, *par excellence*, while they reduce all the phenomena of life and mind to the properties of matter, and at the same time pay no attention to the facts that have been contributed to mental philosophy by such minds as Locke, Berkeley, Reid, Stewart, &c., is truly imposing. Could this last class of facts be

materialized so as to be cut, pinched, tied or pricked; or be soldered together, and driven in like a wedge between their premises and conclusions, they might be found worthy of attention. Becoming sensible, they would be estimated, and reasoning from consciousness down to observation would be as highly valued as reasoning from observation up to consciousness.

In my next communication an attempt will be made to draw a parallel between the development of the brain in the several classes of animals, and the manifestation of the faculties of the mind, with the intention of showing that while it is improper to speak of that part as the organ of the mind, still it indirectly affords assistance to it by counterbalancing the influence of the rest of the nervous system. Compelled, as the agent is, to fix its attention by physical impulses in order to perceive, if there were nothing to disengage it from the influence of these impulses it could not withdraw its attention spontaneously in order to vary it and bring into view the concomitant circumstances, which in the mind of man forms the compound notion, which does or ought to control his volitions. He would be wholly under the influence of his sensations; or, what is the same thing, of the propensities with which his sensations are associated. The moment a sensation is felt, the propensity would be excited and would control the movements of the animal. But if it be the law that the greater the impulse, the greater the effect on the mind, then the large nervous mass of the brain on which impulses are continually being made by the blood, and to which the mind is insensible, must, it is presumed, have the tendency to diminish the effect of that from without made on any given nerve. Thus in proportion as the brain expands, the voluntary power would be increased, and might be directed intellectually, to the comparing of sensations; and morally, to the calling up of motives to control the propensity associated with any sensation when called into action by it. Such a view as this gives as a reason for the existence of the brain, the existence of the rest of the nervous system, and makes them both dependent on the original law which embodies mind with matter, causing it to be influenced by the latter, but allowing it an independent existence. T. B. C.

December, 1843.

PROFESSIONAL ETIQUETTE.

[Communicated for the Boston Medical and Surgical Journal.]

[The following synopsis of what the writer justly considers to be the duties of physicians to patients and to each other, was drawn up by a highly-respectable member of the profession in another State. It is submitted to the faculty generally, with the intention, on the part of the writer, of a more definite disposal of it in his own State hereafter.—Ed.]

1st. Called to a patient, believing he understands the case, the attendant should prescribe until one of the three following circumstances occurs:

1st, dissatisfaction with the effect of his own prescription, when *he* should *request council*; 2d, the *patient* or *friends* wish it, which he should admit, or freely relinquish his charge; 3d, apparent danger of a fatal termination, which he should disclose to the friends, that they may avail themselves of whatever they may choose, to avoid a too oft unprofitable and not unfrequently unreasonable reflection.

2d. To his counsel he should state the case and treatment, with its effects up to that period; and if counsel be called for the following purpose (as often it is), viz., to *direct*, he should follow strictly the directions, till dissatisfied with its effects, when he should report his opinion to the friends, that they may have an opportunity for calling counsel again, or charging himself with the responsibility of prescribing—always rendering a just and true account of his stewardship; or, 2d, to *advise* and enlighten by the evidence of his opinion, enforced by his reasons, leaving him yet with such additional light to pursue his own judgment; or, 3d, which is the more common way, to *confer* and agree on the proper course to be pursued—which course, as in the *first* instance, he should strictly pursue, until dissatisfied with its effects, when he should, as in that instance, so declare, and for like reasons; but if, on comparing opinions, they cannot be reconciled, he should state the fact to the friends for their decision, and if they do not decide, request further counsel for that purpose, always yielding to the expressed wishes of the patient, or friends, so far as compatible with justice to the patient and the honor of the profession.

3d. Called to visit another physician's patient, he should attend under the following circumstances: 1st, if, from all the circumstances, he believes good will arise from the consultation, i. e., if the attending physician is an honorable man, and has been notified of his intended call; or, 2d, if the attending physician, from any cause, *cannot* attend, and the patient needs immediate aid, which he should endeavor to grant, in *silence*, save in *writing*, under seal, to the attending physician, but should not consent to take charge of the patient, until the attending physician has been afforded an opportunity for consultation, and in no instance, nor under any circumstances, should he detract from his neighbor's professional character, by speaking even *truths*, which cannot or are not likely to benefit *others*, to *his* injury—nor publish a difference in opinion, save by the *unavoidable appearance* of difference in prescription—nor seek business through *pretences* to superior skill, a knowledge and use of empirical remedies or new "systems" of practice, but in all things pertaining to his profession, should he conduct himself in a manner best calculated to promote the welfare of his patient, the peace of society, and the honor of the profession, irrespective of the opinions of those whose *knowledge* is *necessarily limited* and views *oftener incorrect* than otherwise. A.

December, 1843.

PREGNANCY WITH HYDATIDS.

At a recent meeting of the Westminster Medical Society (says a writer in the London Lancet), a case was offered for consideration by Dr. Chowne (Lancet, page 226), as "involving an important medico-legal question," and considered by Dr. Reid as "very valuable," and likely "seriously to affect future medical evidence." A woman gave birth to a mass of uterine hydatids, of five months growth, and, wonderful to relate, the delivery was attended and followed by the ordinary symptoms of parturition. "Thirty-six hours afterwards," says Dr. C., "the labia were tumid; the vagina was relaxed and flaccid; the cervix uteri tumid; the os uteri thick, open to the extent of an inch or more, tumid and soft, and giving to the touch the sensation of being fissured. No hydatids remained in it, but there were small coagula passing away, with sanguineous-looking fluid. The parietes of the belly were loose, and the uterus was perceptible above the symphysis pubis. The breasts were large and distended, the areolæ elevated and very brown, the follicles elevated and large; there was also milk in the breast. The secretions from the uterus (seven days after) were such as would occur after labor. The woman, indeed, in every essential particular resembled exactly one in childbed." We are, then, called upon to wonder at this catalogue of symptoms, but should we not have been much more astonished at their absence? Physiological investigations have proved, beyond doubt, that *uterine hydatids* are invariably the result of impregnation. A pregnancy which terminates by the expulsion of an hydatid mass is, in its *early stage*, perfectly normal. At a certain period, however, the ovum, or a particular portion of it, becomes diseased; and generally the chorion or the placenta. Some abnormal mass (very frequently hydatid) is the result. After symptoms of pregnancy have continued for a longer or shorter time, symptoms of *labor* supervene, and the mass is expelled. Dr. Chowne's description of the morbid product voided by his patient certainly renders the case plain enough. "The mass was formed of cysts, coagula intermixed with them and surrounding them, a great part of the mass being enveloped in a membrane resembling *decidua*."

In these cases, therefore, for the first few months after a successful sexual connection, the female is simply, naturally, and healthily, with child, and, of course, we are by no means to be surprised that she evinces symptoms of early pregnancy. And why is it to be considered extraordinary that the expulsion of this blighted ovum should be attended by all the symptoms of delivery? It is, indeed, *blighted*; but for all that, it has increased more materially in size than it would have done had the life of the fœtus been preserved. A woman with hydatid pregnancy is as large at the *sixth* month as at the ninth, and this is ordinarily a most valuable point in the *diagnosis*. But during the early months it is *utterly impossible* to distinguish between a healthy and a hydatid pregnancy. Thus we cannot wonder very much that Dr. Chowne's patient, when delivered of a "five months'" growth, should present the symptoms above recited.

I cannot, with Dr. Chowne and Dr. Reid, feel surprised that a lax state

of the vagina should precede the delivery, as in ordinary parturition; I have myself seen two similar cases, of course attended by this state of the soft parts. Much less can I join Dr. Reid in his assertion that these cases diminish the value of the areola as a symptom of pregnancy. The woman, without doubt, *had been* pregnant.

I should answer the question proposed by Dr. F. Bird, "*Was it really milk that was secreted?*" by assuring him that it really was. Dr. Chowne, indeed, acknowledges that he omitted to test it by the microscope, but "it was rich and white, and differed in its characters on certain days." Besides, "a pupil tasted it, and found it very agreeable." Lastly, the object of introducing this case, however charitable and humane, namely, the fear that a female discovered to have these symptoms of recent delivery might be charged with destroying a child which was never born, might be met with the reply, that such a case could never occur under the superintendence of a medical jurist who knew his duty; for if summoned to examine a woman having all these symptoms, he would not positively declare that she had been recently delivered of a *child*, but he would affirm confidently that such a state of things could only be in consequence of previous sexual intercourse.

Such is the common law respecting "delivery," considered in a medico-legal point of view. "So far," says Beck, "he can pronounce with safety, but if the question have a bearing on the charge of infanticide, *the existence of the child* should be proved."

THE BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON, JANUARY 3, 1844.

*Dislocations and Fractures of the Joints.**—It would be as unnecessary to attempt to prove that this particular work, by the late distinguished Sir Astley Cooper, was one of value, as that rain and dew were of utility to vegetation. So universally have the writings of that great man been circulated, that nothing need be said to enhance their value. A new and much improved edition of "*A Treatise on Dislocations and Fractures of the Joints*" from the fifth London edition, comes from the Philadelphia press of Messrs. Lea & Blanchard, under the superintendence of the Committee of Publication of the Massachusetts Medical Society. The engravings are exceedingly well executed, and the typography, and, in fact, all that belongs to the book, is in a finished style. Facing the title page is an admirable likeness of the great English surgeon, from an original picture by Sir Thomas Lawrence. Besides availing themselves of all the advantages of the latest English editions, put forth under the care of Mr. Bransby B. Cooper, surgeon at Guy's Hospital, Messrs. Lea & Blanchard

* A Treatise on Dislocations and Fractures of the Joints. By Sir Astley Cooper, &c. &c. A new edition, much enlarged, edited by Bransby B. Cooper, Surgeon to Guy's Hospital. With additional observations, and a Memoir of the Author. Philadelphia: Lea & Blanchard. 1844. 8vo. pp. 499.

announce the agreeable intelligence that valuable additional observations have been added from notes furnished by John C. Warren, M.D., the long and well-known professor of Anatomy and Surgery in Harvard University. In this community, and in fact wherever the reputation of Dr. Warren has extended—and where is he not known?—whatever he may have furnished will be considered of essential consequence.

There are eighteen chapters, with an appendix containing observations on fractures of the neck of the femur; and another on the non-union of fractured bones. Lastly, an appendix to the American edition, containing, first, observations on improved apparatus for fractures of the femur; and, secondly, incomplete fracture.

Water Curing.—A self-styled reformer, of Northampton, Mass., called *doctor* in an advertisement that recently appeared in a New York paper, informs the public that he speedily intends delivering six lectures on *curing by water*. The notice proceeds thus—"The doctor has taught and practised this cure for the last twelve years, and has rarely if ever failed in a single instance. He has performed cures of a most wonderful character, the details of which will be given in his lectures. For the purpose of spreading this subject as widely as possible, the tickets will be put at one dollar for a course of six lectures." What a philanthropist this man must be, who has worked in all kinds of harness within less than a dozen years, for the sole benefit of poor, miserable, over-fed, over-comfortable humanity! He has entirely taken the wind out of Priessnitz's sails, by priority of discovery; and having failed to frighten the civilized world from roast beef and wheat bread, into a diet of squash custards, turnip pies and skimmed milk, now kindly determines to cure their present maladies—provided he gets well paid for the water. Amongst the rag-fair quacks of modern times, there are some of more eminence in imposition than others: impudence is a ready passport to the society of fools. Where were those wonderful miracles by water effected? Not in Northampton, it is presumed, or they would have been heard of before. How are the advertiser's powers estimated in the pleasant town of Northampton? What would the intelligent people of that place say of his skill in medicine, or attainments in biblical literature?

Alumni, Graduates, &c., of Berkshire Medical Institution.—A full and well-arranged catalogue of a public institution, like the one recently issued at the Berkshire school, will be regarded as a very great convenience. It furnishes the names of trustees, overseers, faculty and students for the current year, together with a list of the alumni and honorary graduates, from the creation of the College to the present time. It appears that there were one hundred and twenty-seven students attending the late course of anatomical lectures, which shows the school to be very flourishing.

Thomsonian Honorary Degrees.—From the Cincinnati Botanico-Medical Recorder, the following resolution in regard to the conferring of medical degrees, has been taken. The editor seems to combine in his own person the entire power of the institution with which he is connected—

saying *we*, like a king, on all subjects connected with the operations of the College. Perhaps this is perfectly right and proper, since he certainly is superior to the great tribe of which he is hailed the grand sachem. The wonder is, that a man of his attainments, forethought and habitual prudence in the management of ordinary worldly affairs, does not steer his ship out of shoal water, clear of the rocks and reefs that threaten its security, and rid himself of the care and perplexities of Thomsonian ignorance, arrogance and infatuation. Here follows the declaration, and is, as will be seen, of high official import.

"We have determined, therefore, to give diplomas,

"1st. To persons who have faithfully fulfilled the letter of the law, and paid all their bills.

"2d. To those who have practised extensively and successfully for four years or more, and attended one course of lectures here, and paid all their bills.

"3d. To those who satisfy us that they have acquired the knowledge contemplated by its spirit, and paid the charge for the risk of our reputation, and to remunerate us for the expense we have incurred in obtaining the charter and sustaining the institution for their benefit. Say $100.

"4th. We will give, not a diploma, but a certificate that one is qualified to exercise the Thomsonian Practice; when, by examination, we find him well acquainted with it, and he pays us the price of a Thomsonian patent—$20."

Poisonous Meats and Butter from the West.—Dr. J. J. McIlhenny has published a pamphlet at Springfield, Ohio, on the alarming disease called the *trembles*, or *milk-sickness*, which has swept off man and beast with a fearful mortality wherever it has appeared. Dr. McIlhenny says that he has known cases to occur in the middle of winter; but on inquiry invariably ascertained they were in consequence of eating salted meat—"meat that was killed off pasture and put away for family use." According to the most careful observations of this gentleman, the trembles begin to appear in the spring, with the development of vegetation; accompanies its growth in some sections till autumn, and only disappears with the advent of a frost, which locks up the plants for a winter's rest. If beef, for example, is killed at the season of milk-sickness, if infected, it will re-produce the dreaded malady at any period when used as food. This will explain the occasional appearance of solitary cases in the depths of winter. Dr. McIlhenny says, emphatically, "Many cases are, no doubt, produced in our cities, by the use of dried meat and butter which are there taken and sold. I lately noticed in a paper published in New York city, that a number of persons had there died from eating meat, which, upon examination, was found to have been transported from Ohio." Here is honestly confessed the possibility of poisoning the citizens of the Atlantic cities, by the diseased exports of meat and butter from districts where the trembles may have prevailed. This is a grave matter, since vast quantities of dried beef, venison, &c., besides butter, are brought to eastern markets, where they find a ready sale. It devolves upon physicians to watch the character of any anomalous symptoms of active disease traceable to any such source.

Homœopathy vs. *Poor Laws.*—Mr. Newman, one of the surgeons of the Wells Union, in England, has been dismissed from his office by the Poor Law Commissioners, says a London paper, for practising homœopathically among the sick poor confided to his care. The Commissioners obtained the opinion of the College of Physicians, that a person practising that system, exclusively, is altogether unfit to act as a medical officer of the Union. Mr. Newman was offered permission to retire, but he refused, and was therefore removed.

The Veterinary Medical Association.—This Association held its eighth anniversary meeting, in London, on the 13th of November. Addresses were read, and medals and certificates awarded. The prize subject for practitioners for the ensuing year is, the description of "The minute anatomy of the several tissues which form the connecting medium between the coffin-bone and the crest—their *elasticity* or *non-elasticity* to be especially considered; together with the varied *movements* resulting from that bond of union, in the foot of a sound adult horse, *both at his work and during rest in the stable*, under all circumstances of sustaining the superincumbent weight, and otherwise." The subject for the prize thesis for students is, "The anatomy and physiology of the fauces, and of the organs of the voice and deglutition." An oration was also delivered by Mr. Wm. Field, from which we copy the following passage:—

"I now approach a portion of my address in which I would wish, with every feeling of diffidence, to intimate to the learned professors at the Veterinary College a defect which I believe still exists in that establishment—I allude to the facility with which pupils are admitted in the first instance. If any young man present himself for admission, no matter how ignorant he may be; if he have never looked into a Latin grammar, and if he be a perfect stranger to the French tongue; if his acquaintance with mathematics and with English literature in general be on an exact par with his knowledge of languages; in fact, if his education have been altogether neglected, and he be in all respects as unfit a candidate for a liberal profession as can be well imagined—the doors of the College are, notwithstanding, opened wide to receive him, and he is, without a question asked, at once admitted as a pupil. Now this I must regard as a sad oversight. It is a practice that does not hold in the medical profession, and it is provided against by the laws of the Pharmaceutical Society just established. Why should it be maintained in ours, more especially as we pride ourselves in being considered on a level with our brother professors and practitioners in human medicine, a position we cannot expect to preserve in these enlightened times, if we disregard the immense importance and advantages of general education as a means of enhancing the character of the veterinarian, and of upholding him in his acknowledged sphere of society. In the army his rank is well known. In London the enlightened veterinary surgeon is on an equality with the professors of other liberal arts. In country towns and large villages, you find him the companion of the clergyman, the surgeon, the lawyer, and not unfrequently the guest of the gentry in his own immediate neighborhood. Such was not the case in those dark ages to which I have already alluded, during the interregnum—so to speak—of the veterinary art, when the patient was handed over to the tender mercies of the ignorant empiric,

who possessed, as a matter of course, impudence and presumption in abundance, but not one half of the intelligence of the animal for which he was called upon to prescribe, and which was thus left to the chapter of accidents to recover or otherwise, as chance might direct."

Enormous Birds.—The Zoological Society met for the first time in its new rooms, Hanover square, November 28, Mr. Yarrell in the chair, when Professor Owen read a paper on the new genus of extinct birds, *Dinornis.* About three years ago a femur of an immense bird was sent from New Zealand to this country, and Prof. Owen at that time stated his conviction that it belonged to a large bird of the family Struthioindæ. The attention then excited induced persons in New Zealand to prosecute researches for more remains of this extraordinary bird, and the result has been that the Rev. Mr. Williams was enabled to procure a large quantity of the bones of this bird, which have lately arrived in this country. From these bones, which consisted principally of the femora, tibiæ and tarsal bones, with two of the pelvis, and several vertebræ, Prof. Owen has ascertained that there could not have been less than five distinct species of the dinornis. Of these, the one first found is the largest; it must have been about ten feet in length, and he calls it *Dinornis giganteus.* There is no evidence that any of these birds still exist, although traditions prevail amongst the natives of New Zealand of some very formidable bird inhabiting that locality. From the state of the bones, which were found in the mud of a river, there is every reason to suppose that these birds, like the dodo, have only recently become extinct.—*London Lancet.*

Medical Schools and Students.—As nearly as we can ascertain, there are five hundred students now attending medical lectures in New York, both schools having an increase upon the number of last session.

At Philadelphia, we learn that they have fully their usual quota.

At Louisville, the estimated number is two hundred and fifty.—*New York Journal of Medical Science.*

At the Boston Medical School, the number of students, the present season, is one hundred and fifty-three.

Resignation of a Professorship.—Dr. James McClintock has resigned the Presidency, and the Professorship of Anatomy and Surgery, in Castleton Medical College.

Medical Address.—Dr. Archibald M. Welch, of Wethersfield, is to deliver an address to the candidates for medical degrees at Yale College, at the termination of the present course of lectures; and Dr. Abner Brown, of Lowell, Mass., one of the candidates, the valedictory.

To Correspondents, &c.—Dr. Leonard's paper on Chorea, Dr. Bodwell's case of Fracture of the Wrist; Dr. Reynolds's article on Asthma produced by Ipecac., together with several new publications, will have attention forthwith.

Number of deaths in Boston, for the week ending Dec. 30, 29.—Males, 12—Females, 17. Stillborn, 1.
Of consumption, 5—lung fever, 4—infantile, 2—typhus fever, 1—throat distemper, 1—old age, 2—dropsy on the chest, 1—hip complaint, 1—marasmus, 2—hooping cough, 1—dropsy on the brain, 3—syphilis, 1—measles, 1—rickets, 1—intemperance, 1—croup, 1—unknown, 1.
Under 5 years, 12—between 5 and 20 years, 7—between 20 and 60 years, 8—over 60 years, 2.

Use of Tobacco.—The following are the concluding remarks of the Editor of the London Lancet upon the influence of tobacco on the human economy. They are presented as the opinions merely of an intelligent medical man, and not as the undoubted views entertained by the profession generally.

"In the mean time, the facts that we already possess warrant us in concluding that tobacco, used in moderation, is *not injurious to health or to life;* that it originates no peculiar form of disease; and that the thoracic affections, the polypi, the cancers, the colics, the dysenteries, &c., which Rammazini, Fourcroy, Percy, Merat, and hosts of other writers, ascribe to its use, are altogether imaginary as offsprings of 'the weed.'

"Tobacco appears to act solely on the nervous system. The vomiting and diarrhœa which it produces on those who are unaccustomed to its use, or who take it, internally, in poisonous doses, are merely sympathetic symptoms. Upon this view of the physiological action of tobacco, its harmlessness is easily explained. The brain, becoming habituated to the narcotic effects of the tobacco, does not react on the viscera, which continue regularly to perform their functions, and health is preserved. Such is not the case with other narcotic substances, and, more especially with opium, the most important of all. The perpetual use of opium, in addition to its pernicious effects on the brain itself, disorders the digestive system, and, eventually, nearly stops nutrition. This, indeed, is the reason why its long-continued employment invariably destroys the most vigorous constitutions.

Although a conscientious interpretation of *facts* thus obliges us to conclude that tobacco, used in moderation, is not decidedly injurious to health, yet we do not *advocate* smoking. Putting aside the preservative influence which that habit may eventually be proved to possess against certain diseases, we must pronounce smoking to be an idle amusement, specially adapted only for those who, in the absence of profitable subjects of contemplation, are content to pass their hours in the dreamy scrutiny of the clouds they create. It is the principal occupation of the vacant Turk, the indolent oriental, and the scarcely more intellectual lounger of western Europe,—in a word, of those who, not choosing a better employment, are willing merely to *make smoke*, and then persuade themselves that they have really done 'something.'"

Rapid Re-union of Parts.—Dr. Centofanti, of Pisa, vouches for the truth of the following occurrence, in a Florentine medical journal:—A girl, fifteen years old, had two of her fingers suddenly chopped off, through the first phalanx, and, without waiting to "pick up the pieces," she ran to seek surgical assistance. The surgeon caused immediate search to be made for the lost members, and was not a little surprised when they were presented to him doubly divided—that is, they had been each chopped into two pieces, the hand having, doubtless, been closed at the time of the accident. Notwithstanding this, the parts were replaced in their natural situation and closely invested with a bandage. In a few days adhesive inflammation was found to have clearly progressed; healing, in fact, proceeded rapidly, and in the course of the next year it was stated that the fingers had *regained their original mobility!—Omodei's Annali. Univ. di Med.*